

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|                              |                   |                  |                   |
|------------------------------|-------------------|------------------|-------------------|
| In re patent application of: | Momma, et al.     | Attorney Docket: | 117163.00150      |
| Serial No.:                  | 10/552,593        | Group Art Unit:  | 1785              |
| Filed:                       | November 10, 2006 | Examiner:        | Gerard T. Higgins |
| Title:                       | Stent             |                  |                   |

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

RULE 1.132 DECLARATION OF DR. CARSTEN MOMMA

I, Dr. Carsten Momma, declare:

1. I am Dr. Carsten Momma of CORTRONIK GmbH and have been working there since 1998. CORTRONIK GmbH has been developing innovative solutions for vascular intervention. Beside the management of the company, I am responsible for production of vascular implants at the company.

2. I am experienced in the field of stent design and keep current in the field by attendance at industry meetings and have a good fundamental understanding of the issues related to stent design, having worked in the field for nearly 15 years.

3. Additional relevant experience includes:

- a. Laser micromachining
- b. Material science
- c. Laser physics

4. I have read the instant patent application *United States Patent Application Serial No. 10/552,593* (the "'593 application") and the patent *United States Patent No. 6,471,721* (the "'721 patent"), including the specification and the claims of both and I am familiar with the contents thereof. Further, I am a co-inventor of the '593 application.

5. I have read the office action dated July 6, 2010, issued by the United States Patent & Trademark Office.

6. In my opinion, the incorporation of radiopaque material in the '721 patent is not substantially identical to the incorporation of radiopaque material in the current application. Filling a tube stock having cylindrically cut grooves with radiopaque material and then covering the filled grooves with a sputter coating will not create a structure substantially identical to the corresponding portion of the present invention, a wire with a filling completely enclosed by a comparatively thick cover layer. Applying a sputter coating to a filled groove will create a seam along the entire length where the sputter coating is applied. The seam will be visible when examining a cross section of the resultant strut and will negatively affect the structural integrity of the strut. In contrast, extruding a cover layer around a radiopaque core will create a wire with no such seam and the resultant wire will have greater structural integrity.

7. In my opinion, the overall structure of the stent of the '721 patent is not substantially identical to the overall structure of the stent of the current application. The stent of the '721 patent is created by forming a groove in tube stock, inserting radiopaque material into the groove, sputter coating over the tube to avoid galvanic corrosion and then cutting the tube into a particular pattern to form the struts of the stent. Considering the extreme deformations of a stent during expansion, a sufficient adhesion of the coating cannot be guaranteed. Spallings and microcracks can cause corrosion and therefore strut breakage and separation of the radiopaque core, respectively. In contrast, the stent of the current application is created by welding at least one radiopaque marker element onto a radiolucent stent body whereby the marker element is made by extruding a cover layer around a radiopaque core. Because of the extruded cover layer around a radiopaque core no contact corrosion will develop between the radiopaque marker element and the stent. Also no tension will be exerted on the discernable and well-defined weld joints as it will be on the coating of the invention of the '721 patent.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the U.S.C. and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Dr. Carsten Momma

January 04th, 2011

Date